

Message

From: Whittier, Robert [Robert.Whittier@doh.hawaii.gov]
Sent: 8/28/2018 9:04:02 PM
To: TU, LYNDSEY [Tu.Lyndsey@epa.gov]; G D Beckett [g.d.beckett@aquiver.com]; Matt Tonkin [matt@sspa.com]
CC: Donald Thomas [dthomas@soest.hawaii.edu]; Grange, Gabrielle Fenix [gabrielle.grange@doh.hawaii.gov]
Subject: Re: Next Steps & Coord Calls
Attachments: Red Hill CSM-Model_LOE_Review_II_dt.docx

Lyndsey,

To make the COB Tuesday deadline I am forwarding my concerns about the Navy's Red Hill CSM. While not structure to the top 10 or the recent meetings, the attached lays out my concerns. This is a review of the Navy's groundwater flow lines of evidence as listed in Section 6.8 of the CSM report.

My logic is that the criteria for evaluating the Navy's flow and transport model is whether or not it is scientifically defensible. The sub-logic is that if the LOEs are not defensible than any resulting models are likewise not defensible.

Although sometimes people may I do otherwise, I like to keep things simple.

Thanks,
Bob W.

From: TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Sent: Thursday, August 23, 2018 8:41:10 AM
To: G D Beckett; Whittier, Robert; Matt Tonkin
Cc: Donald Thomas; Grange, Gabrielle Fenix
Subject: RE: Next Steps & Coord Calls

Hi All,

I should have followed up earlier this week, but we've been tied up with some senior management briefings. Fenix and I discussed EPA taking the first shot at editing the top ten comments into the body of a letter. For everyone else, I think that the best use of your time is not a highly detailed review of the interim deliverables. Instead, it would be very helpful if you could each relate the follow up actions you heard in response to the topics you individually presented on last week, and or other topics that were raised on the spot last week. I took fairly detailed notes, but there's likely something lost on my part in the technical translation and it would be helpful to get those follow up's from each of you as you heard them. Additionally, if there are other big technical comments related to the Tech memo that you think are important to relay at this time, please include those as well. My preference is that you organize all comments and follow up actions by general categories, such as 'groundwater flow model' 'F&T' etc.

My thought would be to get those follow up items from each of you first, then we will draft a letter and folks will have a chance to give it a look before we send it out. Ideally everyone could get me their take on the Navy's action items and their other comments by EOD Tuesday. I know that Hawaii folks may be hunkered down this week, so let me know if that timeline doesn't work.

I see limited merit in taking on much additional work on our part without understanding what the Navy is able to commit to, so I would think that the follow up call between technical folks should keep that in mind. I can work on setting up a larger follow up call next week once comments are in hand and the letter is (hopefully) drafted.

Feel free to reach out with any questions or comments,

Lyndsey Tu
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From: G D Beckett [<mailto:g.d.beckett@aquiver.com>]
Sent: Wednesday, August 22, 2018 5:01 PM
To: Whittier, Robert <Robert.Whittier@doh.hawaii.gov>; Matt Tonkin <matt@sspa.com>
Cc: Donald Thomas <dthomas@soest.hawaii.edu>; Grange, Gabrielle Fenix <gabrielle.grange@doh.hawaii.gov>; TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Subject: Next Steps & Coord Calls

Hello folks,

It seems our nearest task at hand is to compile our CSM comments for the DOH/EPA team to consider in the response letter to the Navy's submittals. Perhaps our recent key concerns memo can be reframed to capture the top ten comments (and a few beyond). As Fenix has noted, we'll keep the comments in the sphere of objective observations regarding how the Navy team's approach might be improved to provide more confidence and conservatism in their conclusions. It would seem we need to get this memo together soon so that the Navy team has at least some chance to respond and modify some of their approaches within their final deliverable timeframes.

Speaking for myself, I have gone over much of the two documents, but there are certainly details that I have not spent a lot of time looking through. I don't know whether spending more time in detailed review will improve my comments much (particularly for the LNAPL F&T), but I also want to make sure that any review comments are fair and sufficiently informed. Others may be in the same boat?

Beyond the comment letter, there are also a number of tasks in-progress and some upcoming that might be pursued. For instance, Matt & Bob have been working with the synoptic data, and there is much still to be learned from that. The groundwater geochem, isotopes, and temperature evaluations hold the potential to better understand the real-world flow regimes around Red Hill Ridge. The list goes on..

I'd suggest a couple calls are in order in the near future. Perhaps the SME team can speak maybe on Friday afternoon (MDT, morning HST) or early next week to get ourselves aligned with comments & potential to-do tasks. That might be followed by a DOH/EPA mgt call to help direct our efforts and to setup the time-lines for the comment letter and any related items.

Best regards

G.D. Beckett, RG, CHg
Principal Hydrogeologist

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